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# SEMICONDUCTOR DEVICE AND PRODUCTION THEREOF

Patent Number: JP8064634  
Publication date: 1996-03-08  
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Applicant(s): HITACHI LTD  
Requested Patent: ☐ JP8064634  
Application Number: JP19940221113 19940823  
Priority Number(s):  
IPC Classification: H01L21/60; H01L29/78  
EC Classification:  
Equivalents: JP3027512B2

## Abstract

PURPOSE: To enhance the performance of a product by connecting each inner lead directly with a pellet at each connecting part thereby decreasing the external resistance significantly as compared with an electrical connection through bonding wire and separating a header from an inner lead group so that a best material can be employed for the inner lead and the header.

CONSTITUTION: A power transistor comprises a planar pellet 10 on which an MOSFET circuit is fabricated, three inner leads 35, 36, 37, a header 41 for enhancing the heat dissipation performance, and a resin seal 44 sealing the pellet 10, the inner lead group and a part of the header. Each inner lead is connected electrically and mechanically with a connecting part 25, 26, i.e., a bump, on the circuit side major surface of the pellet 10 and the header 41 is jointed to the opposite major surface of the pellet.

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